



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,319	11/28/2006	Domenico Binello	32352-224648 RK	4549
26694	7590	10/23/2009		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998				
EXAMINER				
HSIAO, JAMES K				
ART UNIT		PAPER NUMBER		
3657				
MAIL DATE		DELIVERY MODE		
10/23/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/554,319

Applicant(s)

BINELLO ET AL.

Examiner

JAMES K. HSIAO

Art Unit

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hokanson (5967286) in view of Marone (EP-1227267).

Regarding claim 1, Hokason et al. discloses a supporting shaft (46); a fixed half-pulley (42), wherein the fixed half-pulley is coaxial and fixed to said supporting shaft (col. 3, line 56-58); a mobile half-pulley (44), wherein the mobile half-pulley is coaxial to said supporting shaft and is slidable with respect to said fixed half-pulley (col. 3, lines 55-67); the fixed and mobile half-pulleys defining a race of variable amplitude and the race being engageable by a belt of a drive (fig 2); and a device (72) for compensating the axial thrust, the device comprising a first cam (70) and a second cam (68), wherein said fixed half-pulley and said mobile half-pulley carry the first cam and the second cam respectively (fig 3, 56/58), and are coupled in contact with one another to impart an additional axial thrust on said mobile half-pulley in a direction of compression of said belt in response, in use, to a torque acting on said pulley; wherein said pulley being characterized in that said fixed half- pulley is fixed to said supporting shaft (fig 3), and in that said first cam defined by a single tubular body (fig 3).

Hokason does not specifically disclose the material of the cams, Marone teaches a torque cam assembly wherein cam assemblies are made from plastic (paragraph 37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mold the cam out of plastic as opposed to another suitable material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 3, Morone teaches said second cam means (207) are defined by a cam-follower portion (paragraph 0021, lines 1-2) made of a single piece with said mobile half-pulley (paragraph 0020, lines 1-2 and see Fig. 1).

Regarding claim 4, Morone teaches said mobile half-pulley and said cam-follower portion are made of aluminium (paragraph 0043).

Regarding claim 5, Morone teaches said mobile half-pulley (202) is slidably fitted on a supporting bushing (300) made of plastic material (paragraph 0044, lines 4-5).

Regarding claim 6, Morone teaches said supporting bushing (300) forms part of said body made of plastic material (paragraph 0044).

Regarding claim 7, Morone teaches said supporting bushing is made of a self-lubricating material (paragraph 0044, lines 4-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the CVT assembly of Marone with the CVT of Hokanson since it has been held to be within the general skill of a worker in the art to

select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 8, Hokanson teaches said mobile half-pulley is coupled to said fixed half-pulley with radial play (see Fig. 3).

Regarding claim 9, Hokanson et al. teaches elastic element (74) an adjustable driven clutch having positioning means (290, 296) for pre-loading torsionally said elastic element (see Fig. 10 and col.6, lines 20-21).

Regarding claim 10, Hokanson et al. teach an adjustable driven clutch having the positioning means comprise adjustment means (290) for varying the torsional pre-loading of said elastic element.

Regarding claim 11, Hokanson et al. teach said adjustment means are carried by an element (282) of axial pre-loading of said elastic element.

Regarding claim 12, Hokanson et al. teach said adjustment means comprising a ring of holes (290), which are set at an angular distance apart from one another and are selectively engageable by one end of said helical spring (see Fig. 10 and col.6, lines 13-24).

Regarding claim 13, Hokanson lacks a retention seat made from plastic, Morone teaches it comprises at least one retention seat (213) made in one between said supporting shaft and said body made of plastic material, and at least one appendage (211), which is carried by the other one between said supporting shaft and said body made of plastic material and engages said retention seat.

Regarding claim 14, Morone teaches it comprises a spacer ring (2b) carried by one of said half-pulleys and fitted to a front surface thereof in a position radially internal with respect to said race and facing the other of said half-pulleys (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the CVT assembly of Marone with the CVT of Hokanson since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES K. HSIAO whose telephone number is (571)272-6259. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

JKH